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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,436	03/12/2001	Makoto Inoue	450108-02595	2310

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EXAMINER

RADA, ALEX P

ART UNIT PAPER NUMBER

3714

DATE MAILED: 11/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/743,436

Applicant(s)

INOUE ET AL.

Examiner

Alex P. Rada

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 19-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

In response to the amendment filed September 6, 2003 in which the applicant's have provided arguments to the previous office action, added new claims 28-29, and claims 19-29 are pending in this office action.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 19 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo 1659 in view of Su '714.

3. Kubo discloses a pet robot, light emitting means being apparent eyes provided on the head unit (figure 1), a control means for controlling the flashing of the light emitting means (column 6, line 61 – column 7, line 7). Kubo does not expressly disclose a semi-transparent cover.

Su teaches a doll having a semi-transparent cover (column 1, lines 49-60) over each eye. The examiner interprets the apparent (light emitting) eyes to be seen only when the light emitting means flash or turned on. By having a semi-transparent cover over each eye, one of ordinary skill in the art would be able to provide an animated and realistic effect of a doll (column 1, lines 13-16). Therefore, it would have been obvious to one of ordinary skill in the art the time of the

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applicant's invention was made to modify the eyes of Kubo to each include a semi-transparent cover as taught by Su. To do so would provide an animate and realistic effect to a doll.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to different transparent shades or colors because applicant has not disclosed that the transparent covers that is dark and black semi-transparent cover provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicant's invention to perform equally well with the equivalent teaching of Su because having different semi-transparent shades would provide the same function of an animate and realistic effect to a doll.

4. Claims 20-21 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo 1659 in view of Su '714 as applied to claim 19 above, and further in view of Ho '223.

5. Kubo in view of Su disclose the claimed invention as discussed above except for a plurality of lighting emitting means each having a different shape and /or color of light as recited in claim 20; The shape and /or color of each light emitting means having a shape and /or color so as to match the different emotion as recited in claim 21; and The plurality of light emitting means are arranged at prescribed position of the head unit in the direction of the head unit as recited in claim 27.

Ho teaches a plurality of lighting emitting means each having a different shape and /or color of light, the shape and /or color of each light emitting means having a shape and /or color so as to match the different emotion, and the plurality of light emitting means are arranged at prescribed position of the head unit in the direction of the head unit. By having different shapes and patterns of light for different emotion, one of ordinary skill in the art would be able to provide

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colorful light with different expression. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention was made to modify the robot of Kubo to include a plurality of lighting emitting means each having a different shape and /or color of light, the shape and /or color of each light emitting means having a shape and /or color so as to match the different emotion, and the plurality of light emitting means are arranged at prescribed position of the head unit in the direction of the head unit as taught by Ho. To do so would be able to provide different expressions with colorful emitting lights.

6. Claims 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo 1659 in view of Su '714 and Ho '223 as applied to claims 20-21 and 27 above, and further in view of Kamiya '772.

7. Kubo in view of Su and Ho disclose the claimed invention as discussed above except for an external sensor for detecting surrounding and/or inputs from the outside as recited in claim 22; The control means determines own emotion based on the outputs of the external sensor and previously-provided emotion models created by modeling emotion and selectively makes appropriate determined emotion as recited in claim 23; The light emitting means flash in a flashing pattern suitable for the determined emotion as recited in claim 24; The flashing pattern is a flashing cycle as recited in claim 25; and The pet robot having a moving unit and a driving means as recited in claim 26.

Kamiya teaches an external sensor for detecting surrounding and/or inputs from the outside, the control means determines own emotion based on the outputs of the external sensor and previously-provided emotion models created by modeling emotion and selectively makes appropriate determined emotion, the light emitting means flash in a flashing pattern suitable for

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the determined emotion, the flashing pattern is a flashing cycle, and the pet robot having a moving unit and a driving means. By having external sensors to receive different inputs, one of ordinary skill in the art would be able to trigger a more human like expression. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kubo in view of Ho to include an external sensor for detecting surrounding and/or inputs from the outside, the control means determines own emotion based on the outputs of the external sensor and previously-provided emotion models created by modeling emotion and selectively makes appropriate determined emotion, the light emitting means flash in a flashing pattern suitable for the determined emotion, the flashing pattern is a flashing cycle, and the pet robot having a moving unit and a driving means as taught by Kamiya. To do so would provide an interactive robot with pseudo-emotions to communicate to a use

### *Response to Arguments*

8. Applicant's arguments filed September 6, 2003 have been fully considered but they are not persuasive.

The applicant contends that the Kubo reference does not suggest replacing the transparent cover 30 with a semi-transparent cover nor does it suggest an incentive or a need to do so.

In response to applicant's argument that there is no suggestion to combine the references, the examiner agrees that Kubo reference does not suggest replacing the transparent cover 30 with a semi-transparent cover nor does it suggest an incentive or a need to do so. However the Su reference teaches a doll having a semi-transparent cover (column 1, lines 49-60) over each eye. By having a semi-transparent cover over each eye, one of ordinary skill in the art would be able

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to provide an animated and realistic effect of a doll. The motivation to combine Su to Kubo is found on column 1, lines 13-16 of Su.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex P. Rada whose telephone number is 703-308-7135. The examiner can normally be reached on Monday - Friday, 08:00-16:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

*for*  
Apr

  
S. THOMAS HUGHES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700